

obtain accessories and photographs for a Samoan bird group, while the marine division of the party will make a collection of marine life. The party will then return to Honolulu, possibly stopping at Fanning Island for a short time. Mr. Coultas will then go to Kauai and Laysan Islands to collect material for two additional oceanic bird exhibits, while Dr. Miner and his party will return to San Francisco by steamship and reach New York in December.

During the entire trip special attention will be given to the collection of oceanic marine invertebrates, with particular emphasis on the forms found in comparatively shallow waters and the life of the sea surface. It is expected that many valuable additions to the scientific collections of the museum will be made in this way.

The yacht *Zaca*, which has been put at the disposal of the American Museum for this expedition by Templeton Crocker, has already made four scientific trips, one of which was also in the interests of the American Museum—the 1934 expedition to the Tuamotus, Easter and Pitcairn islands. She is a two-masted gaffrigged schooner with topsails, with the general lines of a Newfoundland Bank fishing-schooner, 118 feet over all, 96 feet water line, 23 feet beam, 14 feet draught, gross tonnage of 84 and is equipped with two Hill Diesel engines, each developing 120 horse power. She is very strongly built, for any ocean travel in any weather, a cruising yacht well adapted for both comfort and utility, with a well-trained crew of twelve men.

LECTURES AT THE UNIVERSITY OF OREGON

THE comparative isolation of the Pacific Northwest from the great centers of population and their accompanying large universities and research institutions makes the problem of securing speakers for scientific meetings a difficult one. During the past academic year the University of Oregon was unusually successful in overcoming this difficulty, largely because of the efforts of the local Sigma Xi chapter and the science faculty.

Dr. C. G. S. de Villiers, dean of sciences, University of Stellenbosch, South Africa, while a guest of the university under the auspices of the Carnegie Foundation for the Promotion of Peace, provided many illuminating lectures and discussions, including "New Theories of Evolution."

Jiro Harada, commissioner of the Imperial Household Museum at Tokyo, while guest of the university as professor of oriental art, gave an address entitled "The Pre-history of Japan."

Dr. Ralph Chaney, head of the department of paleontology, University of California, invited by Sigma Xi, spoke on "Ancient Forests of Oregon,"

and (at a student assembly) on "A Scientist's Adventures in Mongolia and Central America."

Dr. Robert H. Lowie, professor of anthropology, University of California, delivered the address at the annual joint Phi Beta Kappa-Sigma Xi initiation banquet. His subject was "Cultural Anthropology."

While visiting the Sigma Xi chapter at the university and the Sigma Xi club at Oregon State Agricultural College (Corvallis, Ore.), Dr. Armin O. Leuschner, professor of astronomy in the University of California, gave an address at Corvallis, entitled "Long Range Prediction of the Orbits of the Minor Planets."

Other Sigma Xi lectures were: "Some Experiments in the Attempt to Understand Inefficient Reading," Professor H. R. Crosland (psychology), retiring president of Sigma Xi; "Ultimate Theories of Matter," Professor A. E. Caswell (physics); "Philosophy and Science," Professor H. G. Townsend (philosophy); and "Forensic Applications of Blood Groupings," Dr. S. B. Osgood (medicine).

In addition, the science faculty sponsored a series of popular science lectures which were very well attended by townspeople as well as faculty and students of the university. Most of the lectures were given by resident members of the faculty. The program follows:

"Scenic Resources of Oregon," Professor W. D. Smith (geology); "The Universe around Us," Professor A. E. Caswell (physics); "Problems of South Africa," Dean C. G. S. de Villiers, Stellenbosch University, South Africa; "Some Elements of Small Arms Ballistics," Major R. H. Back (R. O. T. C.); "Rambles of a Naturalist in Oregon Winter Time," Professor F. P. Sipe (botany); "Daylight Ghosts or Fantasms of Everyday Life," Professor H. R. Crosland (psychology); "Natural History of Oregon Birds and Mammals," Professor R. R. Huestis (zoology); "Liquid Air," Elliott James (demonstrator at Century of Progress Exposition).

Finally, the university community had the pleasure of having an illustrated lecture on Alaska by Father Hubbard, the Glacier priest. This lecture was sponsored by the Active Club of Eugene, the proceeds going to the support of a summer camp for underprivileged boys.

A. H. KUNZ

PHYSICS SYMPOSIUM AT CORNELL UNIVERSITY

NUCLEAR physics was the subject of the discussions at the second Cornell University physics symposium. The meetings were held in Ithaca on July 2, 3 and 4, and the attendance was about a hundred and thirty. At the first meeting on Thursday morning, July 2, Pro-

fessor R. C. Gibbs extended cordial greetings on behalf of the Cornell group and announced the plans for the meetings. At this session Professor L. A. DuBridge, of the University of Rochester, presided, and papers were presented on the determination of atomic masses. Professor K. T. Bainbridge, of Harvard University, discussed the most recent work on the determination of atomic masses with a mass spectrograph, and Professor M. S. Livingston, of Cornell University, presented a paper, which had been prepared in collaboration with Professor H. A. Bethe, also of Cornell, on the determination of atomic masses from nuclear disintegrations. At the afternoon session, Dr. G. L. Locher, of the Bartol Foundation, presided, and reports were presented by Dr. H. R. Crane, of the University of Michigan, on gamma rays from nuclear transmutations and by Dr. J. J. Livingood, of the University of California, on nuclear disintegrations and radioactivity observed with deuteron bombardment.

At the Friday morning session, Professor E. U. Condon, of Princeton University, presided and papers were presented by Professors H. A. Bethe, of Cornell University, and G. Breit, of the University of Wisconsin. Professor Bethe discussed the information now known about the forces between nuclear particles and the structure of the lighter nuclei. Professor Breit discussed the theory of proton-proton scattering. Professor G. B. Pegram, of Columbia University, presided at the afternoon session, which was devoted to the discussion of experiments with neutrons by Professors E. Fermi and F. Rasetti, of the University of Rome. Professor Fermi presented the results of some of the recent experiments performed in Rome, and also the interpretation of these results. Professor Rasetti discussed experiments carried out in this country, largely at Columbia University, where he has been working during the past year.

Professor Fermi presided at the final session of the symposium on Saturday morning. Papers were presented by Dr. T. W. Bonner, of the California Institute of Technology, and by Dr. L. R. Hafstad, of the Carnegie Institution of Washington. Dr. Bonner discussed the energy relations of the disintegrations observed when light nuclei are bombarded with protons and deuterons. Dr. Hafstad presented the results of the work recently done at Washington on the proton-proton scattering.

In addition to the regular sessions there were informal discussion groups devoted to "Beta-ray spectra," "Nuclear moments" and "Cyclotron technique" as well as a meeting of those particularly interested in nuclear theory.

THE THIRD WORLD POWER CONFERENCE

THE third World Power Conference and the concurrent second Congress on Large Dams will open in Washington in Constitution Hall on the evening of September 7, when Secretary of State Cordell Hull will deliver the main address.

Dr. William F. Durand, of Stanford University, who is acting as general chairman, will preside and will address the delegates in four languages—English, French, German and Spanish. Representatives of Argentina, Mexico and Canada will also speak as joint hosts. The representatives of the following countries will then respond to the welcome: Germany, Poland, Belgium, Denmark, Roumania and Russia. Conference sessions will open at 2:00 P. M. on Monday with a discussion of the coal and oil industries.

On Tuesday afternoon the group will travel to Mt. Vernon for a reception and tea. On Wednesday evening a dinner will be held at the Congressional Country Club for the International Executive Council and the International Second Congress on Large Dams, with Director O. C. Merrill acting as host.

Other speakers on this occasion will be Sir Harold Hartley, international chairman of the conference; M. Gustav Mercier, international chairman of the Second Congress on Large Dams, and Chairman Frank McNinch, of the Federal Power Commission, and representatives of China, Lithuania, Ireland, Uruguay, Greece and others.

On Thursday evening a banquet will be held in the main hall of the Union Station. On this occasion the president of the National Academy of Sciences will pay tribute to the memory of the pioneers of science who created the foundations on which rests the structure of modern power development. Secretary of the Interior Harold L. Ickes will speak next, being followed by representatives of France, South Africa and a South American nation. Floyd L. Carlisle, chairman of the board of the Consolidated Edison Company of New York, will speak next, representing the utility industry, joint sponsors of the conference. Speakers representing Great Britain, Austria and Sweden will follow Mr. Carlisle. Owen D. Young, chairman of the board of the General Electric Company, will be the next speaker, representing the electrical manufacturing group, which is also supporting the conference. He will be followed by speakers representing Japan, Switzerland and Cuba.

President Roosevelt will speak at a general meeting on Friday afternoon, September 11. During his speech he will push a button starting the generation of power and the flow of water through the needle valves at Boulder Dam. The President's speech will be broadcast nationally as will the activity at the dam.